



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/945,108	09/04/2001	Min-Young Kim	P56577	2106
<div>7590 Robert E. Bushnell Suite 300 1522 K Street, N.W. Washington, DC 20005-1202</div>				
<div>07/15/2008</div>				
<div>EXAMINER MONTROYA, OSCITA I</div>				
<div>ART UNIT 2623</div>				
<div>PAPER NUMBER</div>				
<div>MAIL DATE 07/15/2008</div>				
<div>DELIVERY MODE PAPER</div>				

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/945,108

Applicant(s)

KIM ET AL.

Examiner

OSCHTA MONTOYA

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

The final rejection mailed 1/4/2007 was returned to the office 1/8/2007. The examiner subsequently faxed the 1/4/2007 Office Action to the applicant, but the period was not re-started. The final rejection has been re-sent to the applicant to re-start the period.

Response to Arguments

1. Applicant's arguments filed 10/4/2006 with respect to claims 7-18 have been considered but are moot in view of the new ground(s) of rejection.
2. In response to applicant's argument (page 9, 2nd paragraph) that Dillon discusses the assignment of cookies to browsers and not the production/storage of first and second cookies for a channel selection page and for changed information of the channel selection page respectively, applicants should note that Dillon discloses that a user in a home network (column 7, line 32 - column 8, line 25) selects a given channel thereby accessing a certain URL to obtain a corresponding website. In order to maintain advertising revenue, each URL is assigned a unique "cookie" (column 24, line 45 - column 26, line 63). Therefore, the initial channel selection page has a corresponding unique cookie assigned to it and each time the user selects another channel to access another URL, a unique corresponding "cookie" is produced and assigned to the other URL, which corresponds to the production/storage of a second cookie for changed information of the channel selection page as claimed.

3. In response to applicant's argument (page 9, 3rd paragraph) that there is no suggestion to combine Alexander with Dillon, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir.1992). In this case, the cited benefit of tracking displayed advertisements and reporting usage information back to the provider in order to charge advertisers a corresponding fee is expressly recited in Dillon, see column 24, line 44 - column 25, line 43.

4. In response to applicants' argument (page 12, 1st paragraph) that Van Der Vleuten fails to disclose producing a channel selection page, applicants should note that Van Der Vleuten was brought in to teach the extraction of channel information from the channel selection page and storing the extracted channel information in the form of a file and changing the channel information stored in the form of a file in response to an operation by the user. Van Der Vleuten discloses a user can display a **"history list"** (extracted and stored channel information in the form of a file) on the television screen, enabling the user to select a preset by picking a preset from the **"history list"** (Col. 5, lines 55-63) thereby enabling the user to change said channel information, as claimed. Applicant argues that a **"history list"** does not constitute the production of a channel

selection page, but in fact a history list is a page that is displayed to the user that helps a user with the process of selecting a channel.

5. In response to applicants' argument (page 12, 3rd paragraph - page 14, 2nd paragraph) that Van Der Vleuten does not disclose or suggest the step of extracting channel information from a channel selection page and storing the extracted channel information in the form of a file, applicants should pay closer attention the **"history list"** disclosed by Van Der Vleuten. Van Der Vleuten discloses a user can display a **"history list"** on the television screen, enabling the user to select a preset by picking a preset from the history list (Col. 5, lines 55-63), which reads on extracting channel information from a channel selection page. Even by definition, a **"history list"** is stored information from previous occurrences of events, channel selections in this case. Said information of channel selections are extracted and stored as said **"history list"**. Furthermore, Van Der Vleuten discloses the **"history list"** is reordered each time a channel is selected so each time a channel is selected, the channel information is saved in order to maintain a specific order in the **"history list"** to allow a user to use the 'backward' button as well as the 'forward' button with respect to the selected preset from the **"history list"** (Col. 6, lines 16-44). Finally, applicants should note that restoring all channel selection information in a **"history list"** is equivalent to extracting and storing said channel selection information in the form of a file, as claimed.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7-8, 12-13, and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander et al., US 6,177,931 in view of Dillon, US 6,351,467.

Regarding Claim 7, Alexander discloses a method of changing a channel in a digital TV for use in a home wide web (column 3, lines 20-32 and column 10, lines 43-60), the method comprising the steps of:

producing a channel selection page (figure 1) to change a current channel when a user requests a change of the current channel to a user input channel (column 3, lines 20-32 and column 10, lines 43-60);

changing information of the channel selection page (figure 1) by using a channel up/down key (28 and 30 in figure 2) of a remote controller (26 in figure 2) so as to change the current channel to the user input channel (column 3, lines 20-32 and column 10, lines 43-60). Alexander discloses all guide screens are made up of "hard pages". Each time a user scrolls through the program guide so as to change the current channel, a new hard page that can have different Panel ads associated with it is displayed. The new Panel ad shown in display 10 effectively changes the information of the guide or "channel selection page" shown in figure 1 (Col. 20, lines 54-65); and

changing the current channel to the user input channel...whereby a broadcast of the user input channel is displayed without displaying the channel selection page (Col. 4, lines 17-22).

Alexander fails to explicitly disclose producing and storing a first cookie for the channel selection page and producing and storing a second cookie for the changed information of the channel selection page.

In an analogous art, Dillon discloses producing and storing a first cookie for the channel selection page and producing and storing a second cookie for the changed information of the channel selection page (Col. 24, line 45 - Col. 25, line 12). Dillon teaches in order to generate advertising revenue, a service/program guide provider, may charge advertisers based on the number of hits or number of times a particular ad is displayed. In order to record how many times an ad is shown for example in the program guide depicted in Alexander, a cookie is generated and assigned to the requesting user's web browser in order to track how many times the a d is shown on a particular user's program guide. Therefore, each time a user requests to view the program guide or "channel selection page" and then scrolls through each hard page of the program guide, causing the information of the selected page in the program guide or "channel selection page" to change, a corresponding product ad is displayed within the program guide and the user's web browser is assigned a cookie for each ad and the cookie is then stored in memory contained within the user's device.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Alexander with the teachings of Dillon in order to facilitate producing and storing a first cookie for the channel selection page and producing and storing a second cookie for the changed information of the channel selection page for the benefit of tracking displayed advertisements and reporting usage information back to the provider in order to charge advertisers a corresponding fee (Dillon - Col. 24, line 44 to Col. 25, line 43).

As for Claim 8, it is met by the combination of Alexander and Dillon. In particular Dillon teaches wherein the channel information contained in the second cookie is determined by searching a string contained in the second cookie (Coli 24, line 67 - Col. 25, line 25).

Considering Claim 17, the claimed elements of wherein the first and second cookies comprise web browser cookies, corresponds with subject matter mentioned above in the rejection of claim 7, and is likewise treated.

Regarding Claim 12, Alexander discloses a digital TV for use in a home wide web, comprising:

user input means (26 - figure 2) for inputting a request by a user for change of a current channel (column g, lines 20-32 and column 10, lines 43-60);

means for producing a channel selection page (figure 1; Col. 5; lines 20-45) to change the current channel when the user requests the change of the current channel to a user input channel (column 3, lines 20-32 and column 10, lines 43-60);

a remote controller means (26 in figure 2) including a channel up/down key (28 and 30 in figure 2) for changing information of the channel selection page (figure 1) so as to change the current channel to the user input channel (column 3; lines 20-32 and column 10, lines 43-60). Alexander discloses all guide screens are made up of "hard pages". Each time a user scrolls through the program guide so as to Change the current channel, which causes display of a new hard page, the hard page can have different Panel ads associated with it. The new Panel ads shown in display 10 effectively change the information of the channel selection page shown in figure 1 (Col. 20, lines 54-59);

means for changing the current channel to the user input channel by means of channel information... (Col. 35, lines 3-13), whereby a broadcast of the user input channel is displayed without displaying the channel selection page (Col. 4, lines 17-22). Alexander discloses product ads are selected from the library in accordance with channels and time displayed in the EPG. Alexander discloses as an example if a basketball game is shown as scheduled at a particular time, an advertisement for a popular basketball shoe may be advertised in ad window 16.

However, Alexander fails to explicitly disclose a means for producing and storing a first cookie for the channel selection page and means for producing and storing a second cookie for the changed information of the channel selection page.

In an analogous art, Dillon discloses a means for producing and storing a first cookie for the channel selection page and means for producing and storing a second cookie for the changed information of the channel selection page (Col.: 24, line 45 - Col. 25, line 12). Dillon teaches in order to generate advertising revenue, a service or EPG provider, may charge advertisers based on the number of hits or number of times a particular ad is displayed. In order to record how many times an ad is shown for example in an EPG as depicted in Alexander, a cookie is generated and assigned to the requesting user's web browser in order to track how many times the ad is shown on a particular user's EPG. Therefore, each time a user requests to view the EPG or "channel selection page" and then scrolls through each hard page of the EPG, causing the information of the grid page or "channel selection page" to change, a corresponding product ad is displayed on the page and the user's web browser is assigned a cookie for each ad and is stored in memory within the user's device.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Alexander with the teachings of Dillon in order to facilitate producing and storing a first cookie for the channel selection page and producing and storing a second cookie for the changed information of the channel selection page for the benefit of tracking displayed advertisements and reporting usage information back to the provider in order to charge advertisers a corresponding fee (Dillon - Col. 24, line 44 to Col. 25, line 43).

Considering Claim 13, the claimed elements wherein the channel information contained in the second cookie is determined by searching a string contained in the second cookie, corresponds with subject matter mentioned above in the rejection of claim 8, and is likewise treated.

Considering Claim 18, the claimed elements of wherein the first and second cookies comprise web browser cookies, corresponds with subject matter mentioned above in the rejection of claim 12, and is likewise treated.

8. Claims 9-11 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morrison, US 6,359,580 in view of Van Der Vleuten, US 6,460,183.

Regarding Claim 9, Morrison discloses a method of changing a channel in a digital TV (figure 4) for use in a home wide web, the method comprising the steps of:

producing a channel selection page (figure 2) to change a current channel when a user requests a change of the current channel to a user input channel (Col. 2, lines 47-63). Morrison discloses that a user uses digit keys on a remote control in order to change channels (see 12 in figure 1) and if the channel is available on more than one source, an on-screen menu or "channel selection page" is displayed (See 22 in figure 1).

Morrison further discloses extracting channel information from the channel selection page... (24, 26 - figure 1, Col. 2, line 61 - Col. 3, line 2).

Morrison teaches, changing the current channel to the user input channel (26 - figure 1) by means of the changed channel information, whereby a broadcast of the user input channel is displayed without displaying the channel selection page (Col. 2, line 47 - Col. 3, line 2). Morrison discloses once a user selects a source, the display menu is removed from the screen and the user's requested channel is then selected and displayed. Therefore, the user's requested channel is selected without displaying the channel selection page.

Morrison fails to disclose extracting channel information from the channel selection page and storing the extracted channel information in the form of a file and changing the channel information stored in the form of a file in response to an operation by the user.

In an analogous art, Van Der Vleuten teaches, producing a channel selection page to change a current channel when a user requests a change of the current channel to a user input channel (Col. 5, lines 55-63). Van Der Vleuten discloses the user can request the display of a history list or "channel selection page" in order to facilitate picking a channel.

Van Der Vleuten teaches, extracting channel information from the channel selection page and storing the extracted channel information in the form of a file (Col. 5, line 34 - Col. 6, line 15). Van Der Vleuten discloses channels that have been previously selected are stored in history means 110, which is used to keep a record of previously

selected channels. These presets can be recalled by operating the "backward" button 118, which controls the backward means 111, or the "forward" button 119, which controls the forward means 112 (Column 3, lines 41-45). Channels are stored into the history list by either being inputted using the numerical keys or by using the channel up/down key. Further, when the user requests to view the history list or "channel selection page", if the user chooses to select a channel from the history list using the backward or forwards means, the processor extracts the information from the history list in order to change the channel.

Van Der Vleuten teaches, changing the channel information stored in the form of a file in response to an operation by the user by disclosing if the initial history list is given by [1,3,5], and preset "6" is selected by entering "6" with the numerical means 117, the new history list would be [1,3,6,5], storing the updated history list in a file in history means 110 (Column 6, lines 16-44).

Van Der Vleuten teaches, changing the current channel to the user input channel by means of the changed channel information, whereby a broadcast of the user input channel is displayed without displaying the channel selection page by disclosing a user can use numerical means 117 to input channel 6, and the information for channel 6 is updated in history means 110 and the history list is removed from the screen so as to not display the history list or "channel selection page".

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Morrison with the teachings of Van Der Vleuten to

facilitate a method of tuning a channel using stored file information for the benefit of allowing users to return to signals which were visited previously.

As for Claim 10, it is met by the combination of Morrison and Van Der Vleuten. In particular, Van Der Vleuten teaches that the user manipulates a direction key to select the user input channel, a value of the current channel is changed by as much as "1" by disclosing zapping means 109 can be controlled by the up/down means 116, which normally comprises an "up" button and a "down" button. If the "down" button is pressed, the zapping means 109 take the currently selected preset number and control the preset means 108 to select the preset preceding the currently selected preset. For example, if preset "20" is currently selected, pressing the "down" button would select preset "19". Similarly, pressing the "up" button would select preset "21" (Column 3, lines 29-41).

As for Claim 11, it is met by the combination of Morrison and Van Der Vleuten. In particular, Van Der Vleuten teaches producing a channel selection page corresponding to an input digit a user entering a preset using numerical means 117 in step 203 of figure 2 (Col. 4, lines 25-26).

Van Der Vleuten discloses extracting channel information from the produced channel selection page and calculating a difference value between a value of the extracted channel information and a value of the channel information Stored in the form

of a file by disclosing in the step 208, Sel gets the value Num, which means that the preset is selected, which corresponds to the number entered (Col. 4, lines 28-30).

Van Der Vleuten teaches, changing the channel information stored in the form of a file by as much as the difference value by disclosing a user entering a preset using numerical means 117 in step 203 of figure 2. In the step 208, Sel gets the value Num, which means that the preset is selected, which corresponds to the number entered. The test in the step 216 succeeds if the currently selected preset corresponds to the preset at the current position in the history list. If the test in the step 216 fails, step 211 is performed. In the step 211, the newly selected preset is appended to the history list. This is achieved by increasing Pos by 1, storing the number of the newly selected preset at the location indicated by Pos, and making Len equal to Pos Column 4, lines 30-45).

Regarding Claim 14, Morrison discloses a digital TV (figure 4) for use in a home wide web, comprising: user input means (125- figure 4) for inputting a request by a user for change of a current channel (Col. 3, lines 64-66). Morrison discloses microcomputer 110 receives user-initiated commands from an infrared (IR) receiver 122 and from a "local" keyboard 120 mounted on the television receiver itself. IR receiver 122 receives IR transmissions from remote control transmitter 125 (column 3, lines 64-66).

Morrison further teaches, means for producing a channel selection page (figure 2) to change the current channel when the user requests the change Of the current channel to a user input channel (Col. 2, lines 47-63). Morrison discloses a user uses the

keys on remote control in order to change channels (12 -figure 1) and if the channel is available on more than one source, an on-screen menu or "channel selection page" is displayed (22 - figure 1).

Morrison teaches, means for extracting channel information from the channel selection page (24, 26 - figure 1; Col. 2, line 61 - Col. 3, line 2).

Morrison teaches, means for changing the current channel to the user input channel by means of the changed channel information, whereby a broadcast of the user input channel is displayed without displaying the channel selection page (Col. 2, line 47- Col. 3, line 2). Morrison discloses once a user selects a source, the display menu is removed from the screen and the user's requested channel is then selected and displayed. Therefore, the user's requested channel is selected without displaying the channel selection page.

However, Morrison fails to disclose means for storing the extracted channel information in the form of a file and means for changing the channel information stored in the form of a file in response to an operation by the user.

In an analogous art, Van Der Vleuten teaches user input means (107 -figure 1) for inputting a request by a user for change of a current channel (Col. 3, lines 7-22).

Van Der Vleuten further teaches, means for producing a channel selection page to change a current channel when a user requests a change of the current channel to a user input channel (Col. 5, lines 55-63). Van Der Vleuten discloses the user can request

the display of a history list or "channel selection page" in order to facilitate picking a channel.

Van Der Vleuten teaches, means for extracting channel information from the channel selection page (Col. 5, line 34 - Col. 6, line 15). Van Der Vleuten discloses channels that have been previously selected can be recalled by operating the "backward" button 118, which controls the backward means 111, or the "forward" button 119, which controls the forward means 112 (Column 3, lines 41-45). Further, when the user requests to view the history list or "channel selection page", if the user chooses to select a channel from the history list using the backward or forwards means, the processor extracts the information from the history list in order to change the channel.

Van Der Vleuten discloses, means for storing the extracted channel information in the form of a file (Col. 5, line 34 - Col. 6, line 15). Van Der Vleuten discloses channels that have been previously selected are stored in history means 110, which is used to keep a record of previously selected channels (Column 3, lines 41-42).

Van Der Vleuten teaches, means for changing the channel information stored in the form of a file in response to an operation by the user by disclosing if the initial history list is given by [1,3,5], and preset "6" is selected by entering "6" with the numerical means 117, the new history list would be [1,3,6,5], storing the updated history list in a file in history means 110 (Column 6, lines 16-44).

Van Der Vleuten teaches, means for changing the current channel to the user input channel by means of the changed channel information, whereby a broadcast of the user input channel is displayed without displaying the channel selection page by

disclosing a user can use numerical means 117 to input channel 6, and the information for channel 6 is updated in history means 110 and the history list is removed from the screen so as to not display the history list or "channel selection page".

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Morrison with the teachings of Van Der Vleuten to facilitate means for tuning a channel using stored file information for the benefit of allowing users to return to signals which were visited previously.

Considering Claim 15, the claimed elements when the user manipulates a direction key to select the user input channel, a value of the current channel is changed by as much as "1", corresponds with subject matter mentioned above in the rejection of claim 10, and is likewise treated.

Considering Claim 16, the claimed elements when the user manipulates a digit key to select the user input channel, the means for changing the channel information stored in the form of a file produces a channel selection page corresponding to an input digit, extracts channel information from the produced channel selection page, calculates a difference value between a value of the extracted channel information and a value of the channel information stored in the form of a file, and changes the channel information stored in the form of a file by as much as the difference value, corresponds with subject matter mentioned above in the rejection of claim 11, and is likewise treated.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OSCHTA MONTOYA whose telephone number is (571)270-1192. The examiner can normally be reached on Monday/Friday 7:30 to 5:00 off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

OM

/Christopher Grant/

Supervisory Patent Examiner, Art Unit 2623